

**REMARKS**

**Present Status of the Application**

The Office Action has allowed claims 1-16. The Office Action rejected claims 17-18, 20 and objected claim 19. Specifically, the Office Action rejected claim 17 under 35 U.S.C. 102(b), as being anticipated by Kim et al. (U.S. 6,396,106 B2). The Office Action also rejected claims 17-18 and 20 under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. 6,396,106 B2). The Office Action objected claim 19 as being dependent upon a rejected base claim. Applicants have amended claim 17 and canceled 19-20. After entry of the foregoing amendments, claims 17-18 remain pending in the present application, and reconsideration of those claims is respectfully requested.

**Discussion of Office Action Rejections**

*Applicants respectfully traverse the 102(b) rejection of claim 17 because Kim et al. (U.S. 6,396,106 B2) does not teach every element recited in these claims.*

In order to properly anticipate Applicants' claimed invention under 35 U.S.C 102, each and every element of claim in issue must be found, "either expressly or inherently described, in a single prior art reference". "The identical invention must be shown in as complete details as is contained in the .... claim. Richardson v. Suzuki Motor Co., 868 F. 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. 2131, 8<sup>th</sup> ed., 2001.

Claim 17 is related a thin film transistor as recited following:

Claim 17. A thin film transistor (TFT), comprising:  
a gate on a substrate;  
an insulating layer over the substrate covering the gate;  
a channel layer on the insulating layer above the gate; and  
a source/drain on the channel layer, *the source/drain comprising a composite layer of MoNb/AlNd or MoNb/AlNd/MoNb.*

Kim discloses a thin film transistor as shown in FIG. 2 comprising a gate electrode 33, a gate insulating layer 37 covering the gate electrode 33, an active layer 39 on the gate insulating layer 37 corresponding to the gate electrode 33, an ohmic contact layer 41 on the active layer 39 at each side of an area excluding a portion corresponding to the gate electrode 33 and source and drain electrodes 43, 45 covering the ohmic contact layer 41. The source and drain electrodes 43, 45 are formed from Cr, Mo, MoW or MoNb. Kim does not disclose that source and drain electrodes of a thin film transistor comprises a composite layer of MoNb/AlNd or MoNb/AlNd/MoNb. Hence, Kim does not teach every element recited in claim 17.

For at least the foregoing reasons, Applicant respectfully submits that independent claim 17 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claim 18 patently define over the prior art as well.

*Applicants respectfully traverse the rejection of claim 18 under 103(a) as being unpatentable over Kim. (U.S. 6,396,106) because a prima facie case of obviousness has not been established by the Office Action.*

Customer No.: 31561  
Application No.: 10/605,403  
Docket No.: 11401-US-PA

Applicants first submit that, as disclosed above, Kim fails to teach or suggest each and every element of claim 17 from which claim 18 depend. Claim 18 claims that an amount of niobium in the MoNb alloy of the composite layer of MoNb/AlNd or MoNb/AlNd/MoNb is less than 10%. Because Kim fails to teach or suggest that source and drain electrodes of a thin film transistor comprises a composite layer of MoNb/AlNd or MoNb/AlNd/MoNb, claim 18 describes the composition percentage of the materials in the alloy does also not teach or suggest by Kim.

Customer No.: 31561  
Application No.: 10/605,403  
Docket No.: 11401-US-PA

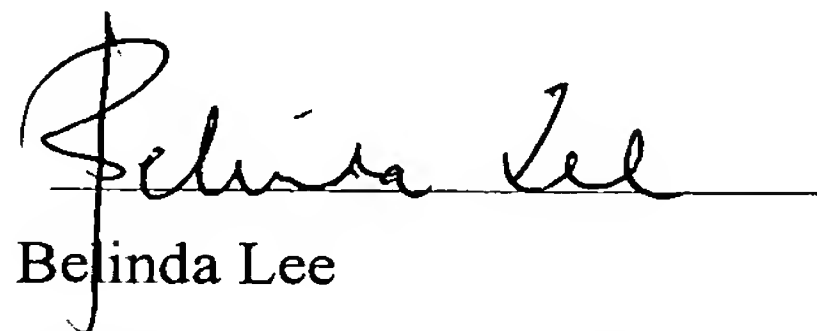
**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending claims 1-18 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

June 7, 2004



Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office  
7<sup>th</sup> Floor-1, No. 100  
Roosevelt Road, Section 2  
Taipei, 100  
Taiwan  
Tel: 011-886-2-2369-2800  
Fax: 011-886-2-2369-7233  
Email: [belinda@jcipgroup.com.tw](mailto:belinda@jcipgroup.com.tw)  
[Usa@jcipgroup.com.tw](mailto:Usa@jcipgroup.com.tw)